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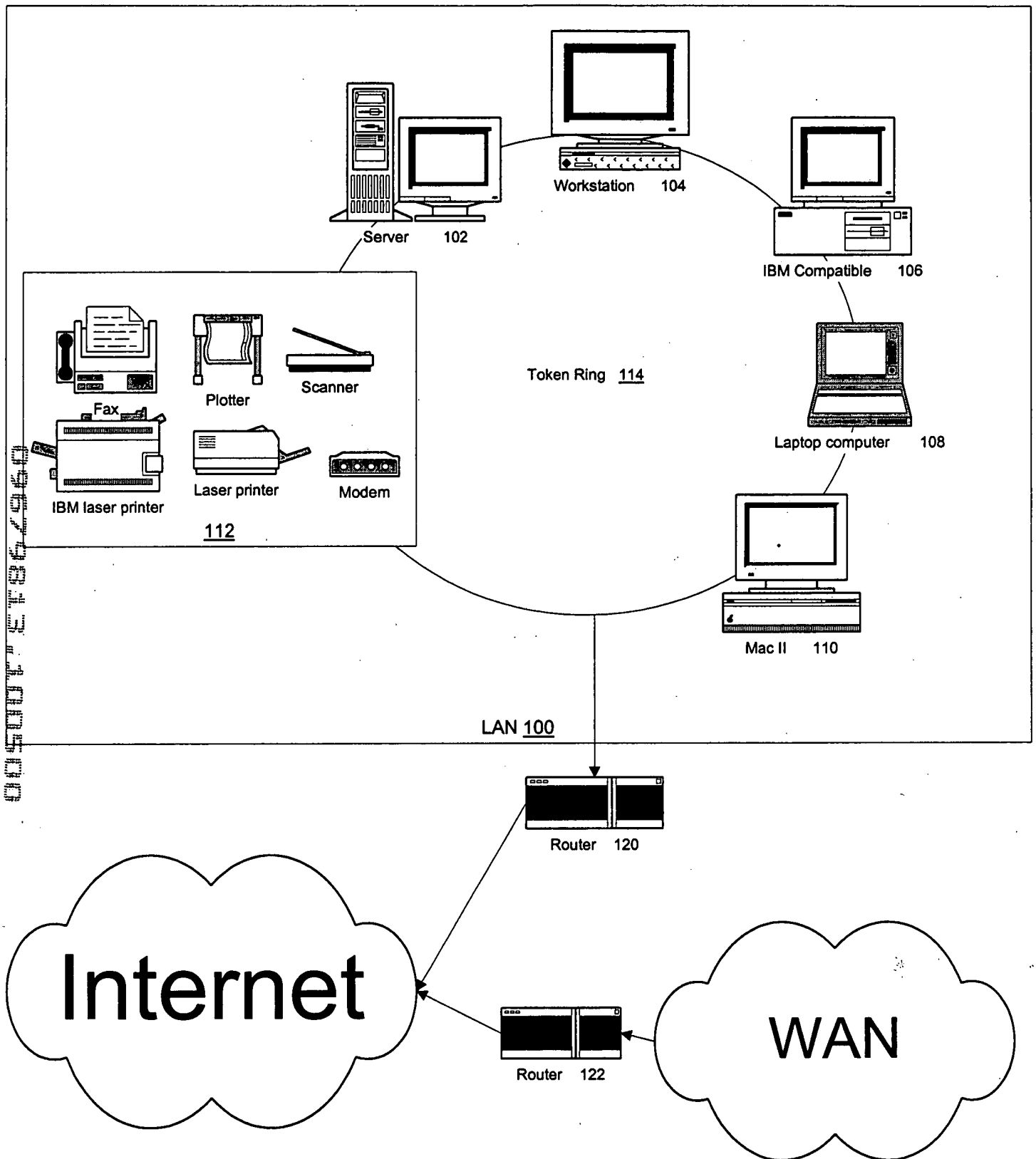


Fig. 1

09679813-100500

| |
|---|
| Application Layer / Layer 5 <u>202</u> |
| Transport Layer / Layer 4 <u>204</u> |
| Internet Layer / Layer 3 <u>206</u> |
| Network Interface Layer / Layer 2 <u>208</u> |
| Physical Layer / Layer 1 <u>210</u> |

TCP/IP Layering Model

Fig. 2

Figure 3

System 300

Independent Host Site

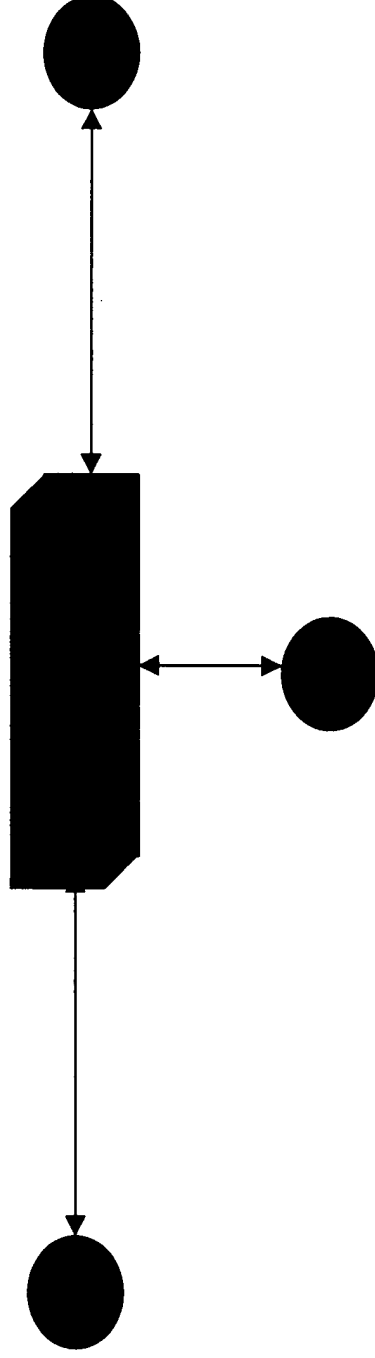


Figure 4

System 400

Enterprise Trading Network

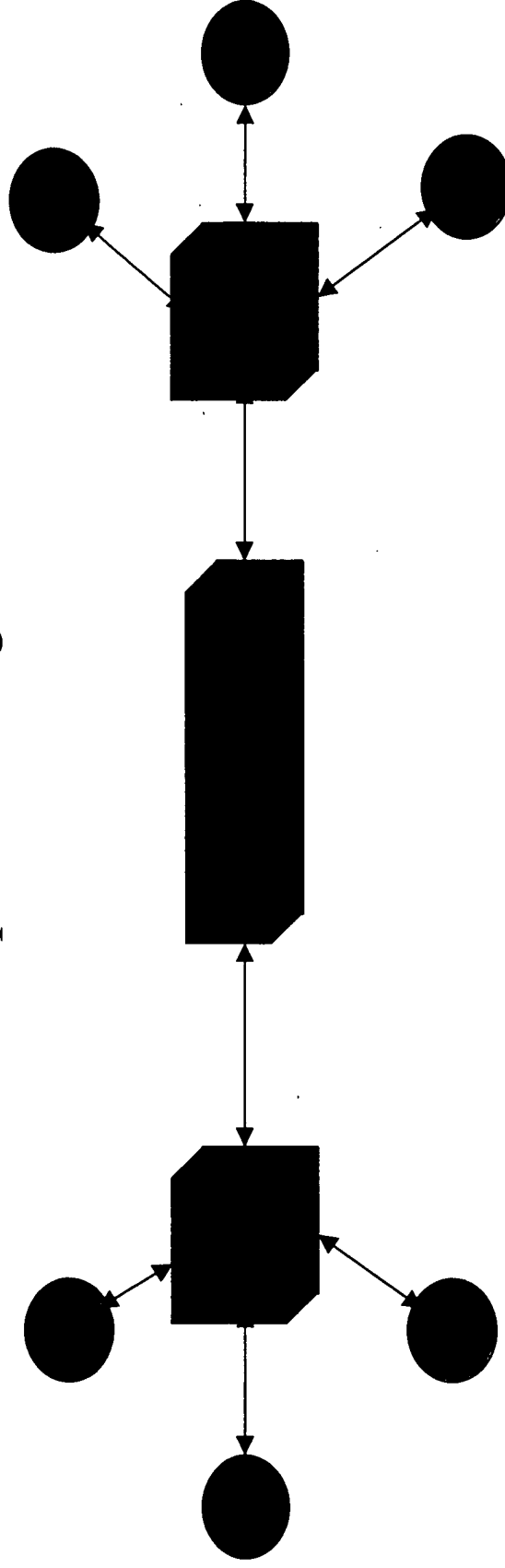


Figure 5

Global Trading Network

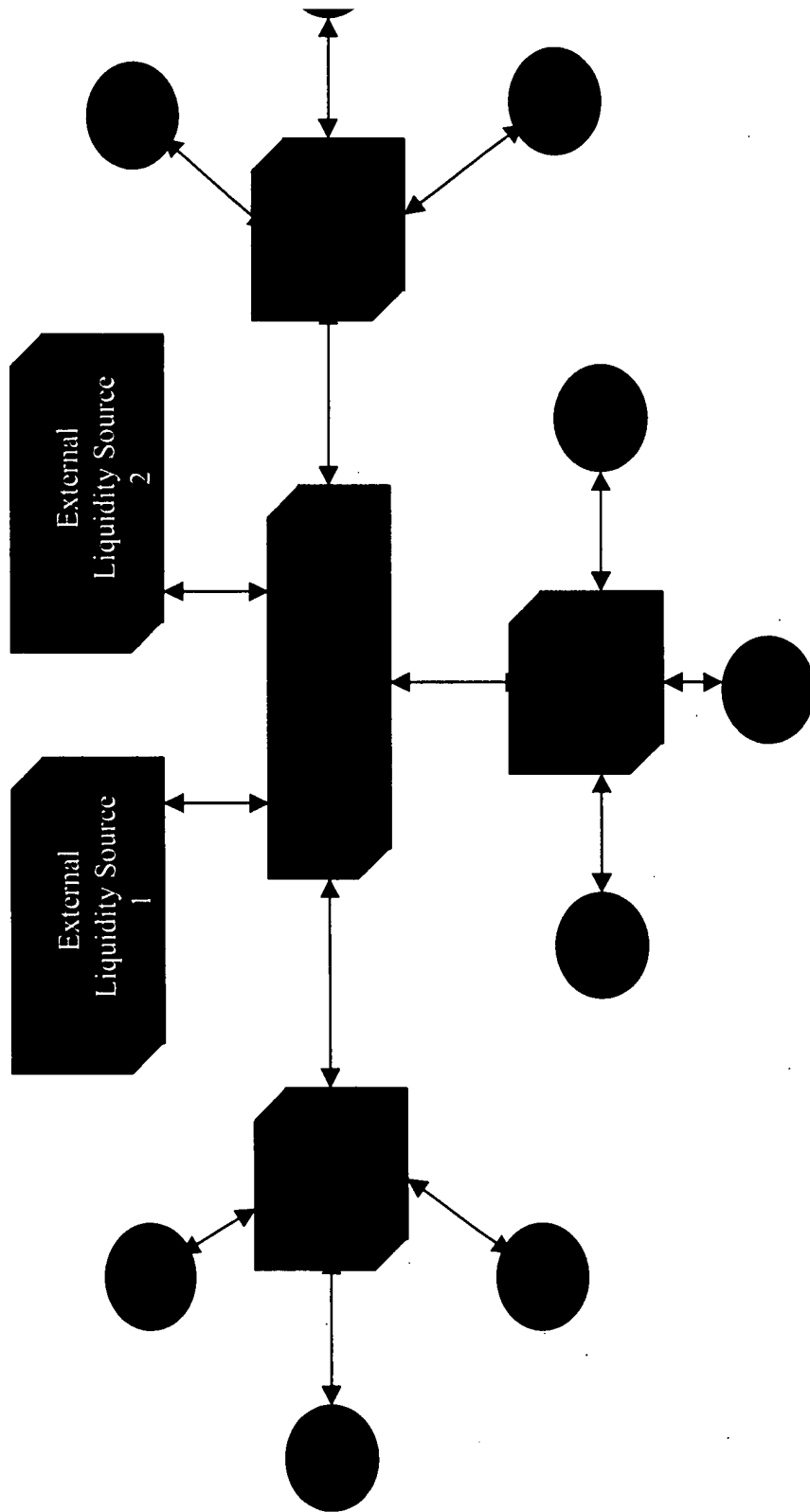


Figure 6

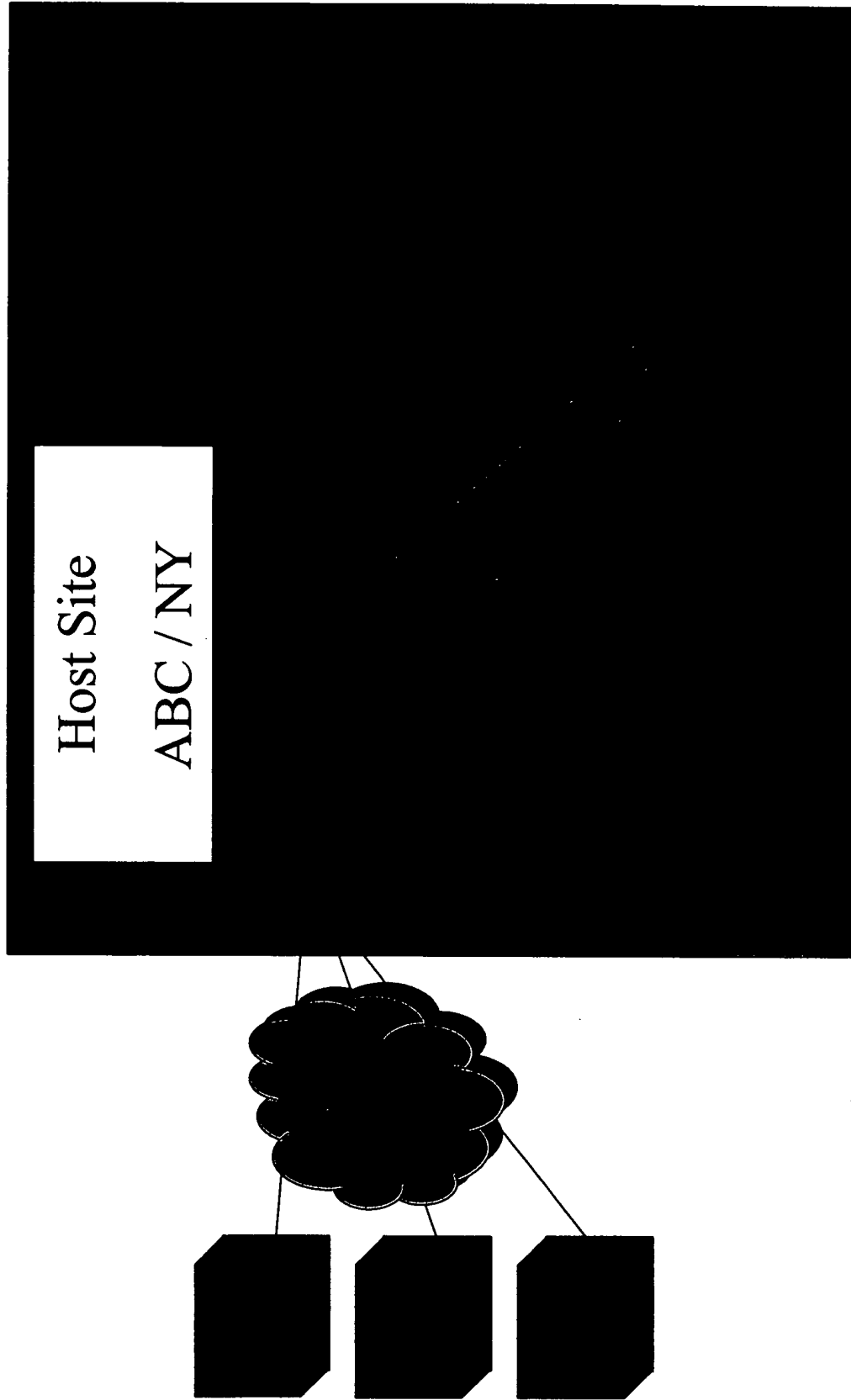


Figure 7

Market Definitions

| | | | | | |
|--------------------|---|------|-----|-----------------|-------------|
| A) EUR/USD Spot FX | 1 | BUY | EUR | Spot Date (T+2) | 1 |
| | 2 | SELL | USD | Spot Date (T+2) | Trade price |
| | | | | | |
| B) USD/JPY Spot FX | 1 | BUY | USD | Spot Date (T+2) | 1 |
| | 2 | SELL | JPY | Spot Date (T+2) | Trade price |
| | | | | | |
| C) EUR/JPY Spot FX | 1 | BUY | EUR | Spot Date (T+2) | 1 |
| | 2 | SELL | JPY | Spot Date (T+2) | Trade price |
| | | | | | |

Figure 8

Initial Orders

| | | | | | |
|--------------------|---|-----|------|-----------|--------|
| A) EUR/USD Spot FX | 1 | 101 | BUY | 1,000,000 | 1.0235 |
| | 2 | 102 | SELL | 1,000,000 | 1.0245 |
| | | | | | |
| B) USD/JPY Spot FX | 3 | 103 | BUY | 3,000,000 | 103.15 |
| | 4 | 104 | SELL | 7,000,000 | 103.25 |
| | | | | | |
| C) EUR/JPY Spot FX | 5 | 105 | BUY | 1,000,000 | 105.40 |
| | 6 | 106 | SELL | 2,000,000 | 105.50 |

Figure 9

State Of Markets Following Placement Of Initial Orders

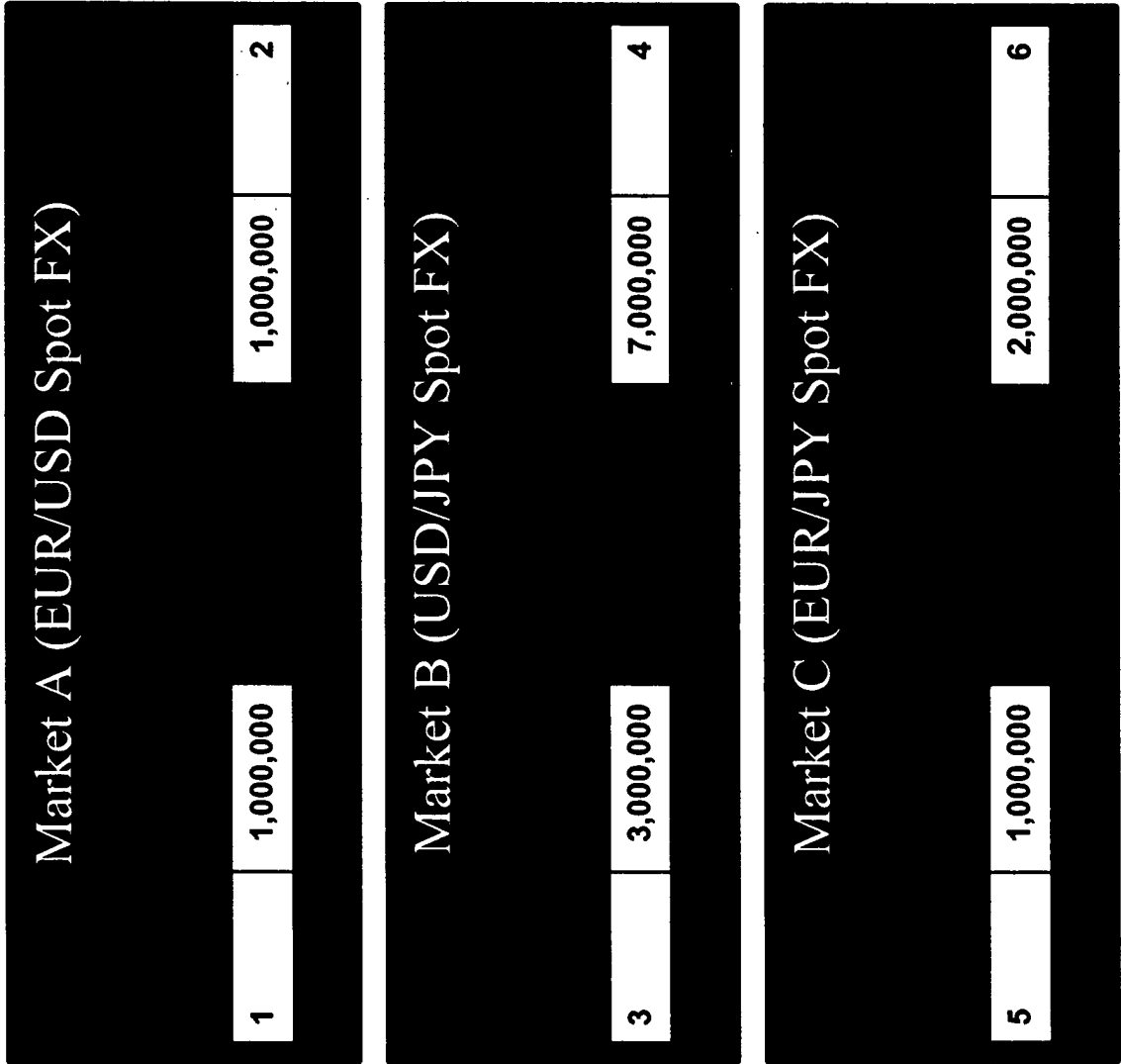


Figure 10

FX Arbitrage Strategy

Required ROI: 1/10 % (44% annualized)

Profit Location: USD Spot

| | | | | | | | |
|---|---------------|------|--------|-----------|--|------------|-----------|
| 1 | A) EUR/USD | Sell | 1.0235 | 1,000,000 | (C.BestPrice / B.BestPrice) x 1.001 | 1.02380514 | 2,000,000 |
| | | | | | | | |
| 2 | B) USD/JPY | Sell | 103.15 | 3,000,000 | (C.BestPrice / A.BestPrice) x 1.001 | 103.180752 | 1,022,386 |
| | | | | | | | |
| 3 | C) EUR/JPY | Buy | 105.50 | 2,000,000 | (A.BestPrice x B.BestPrice) / 1.001 | 105.468556 | 1,000,000 |

Figure 11

Market A Calculated Order Amount

EUR Spot

| | | | |
|----|-----------|-----------|----|
| C1 | 2,000,000 | 2,000,000 | A1 |
|----|-----------|-----------|----|

USD Spot

| | | | |
|----|-----------|---------------|----|
| A2 | 2,047,800 | 2,045,564.712 | B1 |
|----|-----------|---------------|----|

JPY Spot

| | | | |
|----|-------------|-------------|----|
| B2 | 211,000,000 | 211,000,000 | C2 |
|----|-------------|-------------|----|

Figure 12

Market B Calculated Order Amount

EUR Spot

| | | | |
|----|-----------|-----------|----|
| C1 | 1,000,000 | 1,000,000 | A1 |
|----|-----------|-----------|----|

USD Spot

| | | | |
|----|-----------|--------------|----|
| A2 | 1,023,500 | 1,022,385.89 | B1 |
|----|-----------|--------------|----|

JPY Spot

| | | | |
|----|-------------|-------------|----|
| B2 | 105,500,000 | 105,500,000 | C2 |
|----|-------------|-------------|----|

Figure 13

Market C Calculated Order Amount

EUR Spot

| | | | |
|----|-----------|-----------|----|
| C1 | 1,000,000 | 1,000,000 | A1 |
|----|-----------|-----------|----|

USD Spot

| | | | |
|----|-----------|---------------|----|
| A2 | 1,023,500 | 1,022,394.571 | B1 |
|----|-----------|---------------|----|

JPY Spot

| | | | |
|----|-------------|-------------|----|
| B2 | 105,460,000 | 105,460,000 | C2 |
|----|-------------|-------------|----|

Figure 14
Orders Generated By FX Arbitrage Strategy

| | | | | | | |
|--------------------|---|-----|------|-----------|--------|--|
| | | | | | | |
| A) EUR/USD Spot FX | 7 | 107 | SELL | 2,000,000 | 1.0239 | |
| | | | | | | |
| B) USD/JPY Spot FX | 8 | 107 | SELL | 1,022,386 | 103.19 | |
| | | | | | | |
| C) EUR/JPY Spot FX | 9 | 107 | BUY | 1,000,000 | 105.36 | |

Figure 15
State Of Markets Following Activation Of FX Arbitrage Strategy

| Market A (EUR/USD Spot FX) | | | | |
|----------------------------|-----------|--------|-----------|---|
| 1 | 1,000,000 | | 2,000,000 | 7 |
| | | 1.0245 | 1,000,000 | 2 |

| Market B (USD/JPY Spot FX) | | | | |
|----------------------------|-----------|--------|-----------|---|
| 3 | 3,000,000 | | 1,022,386 | 8 |
| | | 103.25 | 7,000,000 | 4 |

| Market C (EUR/JPY Spot FX) | | | | |
|----------------------------|-----------|--------|-----------|---|
| 9 | 1,000,000 | | 2,000,000 | 6 |
| 5 | 1,000,000 | 105.40 | | |

Figure 16

New Order Which Triggers Execution Of

FX Arbitrage Strategy

| | | | | |
|--------------------|----|-----|-----|-----------|
| | | | | |
| A) EUR/USD Spot FX | 10 | 110 | BUY | 2,000,000 |
| | | | | 1.0239 |

Figure 17
Trades Generated By Execution Of
FX Arbitrage Strategy

| | | | | | | | | | |
|--------------------|---|----|-----|---|-----|-----------|--------|--|--|
| | | | | | | | | | |
| A) EUR/USD Spot FX | 1 | 10 | 110 | 7 | 107 | 2,000,000 | 1.0239 | | |
| | | | | | | | | | |
| B) USD/JPY Spot FX | 2 | 3 | 103 | 8 | 107 | 2,045,564 | 103.15 | | |
| | | | | | | | | | |
| C) EUR/JPY Spot FX | 3 | 9 | 107 | 6 | 106 | 2,000,000 | 105.50 | | |